AMENDMENTS TO THE CLAIMS:

     This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

     23-33 (Canceled).

     26

34. (New)   An apparatus, comprising:

     a correction circuit coupled to receive a first symbol transmitted from a first antenna at a first time and a conjugate of a second symbol transmitted from a second antenna at the first time, the correction circuit producing a first symbol estimate in response to the first symbol and the conjugate of the second symbol; and

     a combining circuit coupled to receive a plurality of symbol estimates including the first symbol estimate, the plurality of symbol estimates corresponding to a respective plurality of signal paths, the combining circuit producing a first symbol signal in response to the plurality of symbol estimates.

     27

35. (New)   An apparatus as in claim 34, wherein the correction circuit is further coupled to receive a second symbol transmitted from the first antenna at a second time and a complement of a conjugate of the first symbol from the second antenna at the second time.

     28

36. (New)   An apparatus as in claim 35, wherein the correction circuit produces the first symbol estimate and a second symbol estimate in response to the first symbol, the conjugate of the second symbol, the second symbol, and the complement of the conjugate of the first symbol.

     29

37. (New)   An apparatus as in claim 36, wherein the correction circuit is further coupled to receive a first estimate signal and a second estimate signal and wherein the correction circuit produces the first symbol estimate and the second symbol estimate in

TI-28441A   2

response to the first symbol, the conjugate of the second symbol, the second symbol, the complement of the conjugate of the first symbol, the first estimate signal, and the second estimate signal.

30

~~38~~. (New) An apparatus as in claim ~~34~~ 26, wherein the correction circuit receives the first symbol and the conjugate of the second symbol via a common receive antenna.

31

~~39~~. (New) An apparatus as in claim ~~34~~ 26, wherein the correction circuit receives the first symbol and the conjugate of the second symbol over a common frequency band.

32

~~40~~. (New) An apparatus as in claim ~~34~~ 26, wherein the plurality of symbol estimates corresponds to one of the first and second symbols.

33

~~41~~. (New) An apparatus as in claim ~~34~~ 26, wherein the combining circuit is a rake combiner.

34

~~42~~. (New) An apparatus as in claim ~~34~~ 26, wherein said first antenna and said second antenna are transmitting antennas.

35

~~43~~. (New) An apparatus as in claim ~~34~~ 26, wherein said correction circuit is coupled to an antenna that receives said first symbol transmitted from said first antenna and said conjugate of said second symbol transmitted from said second antenna.

36

~~44~~. (New) A method, comprising the steps of:

receiving a first symbol transmitted from a first antenna at a first time and a conjugate of a second symbol transmitted from a second antenna at the first time;

producing a first symbol estimate in response to the first symbol and the conjugate of the second symbol;

receiving a plurality of symbol estimates including the first symbol estimate, the plurality of symbol estimates corresponding to a respective plurality of signal paths; and

TI-28441A 3

producing a first symbol signal in response to the plurality of symbol estimates.

45. (New)   The method of claim 44, further including receiving a second symbol transmitted from the first antenna at a second time and a complement of a conjugate of the first symbol from the second antenna at the second time.

46. (New)   The method of claim 44, further including producing a second symbol estimate in response to the first symbol, the conjugate of the second symbol, the second symbol, and a complement of the conjugate of the first symbol.

47. (New)   The method of claim 44, further including receiving a first estimate signal and a second estimate signal and wherein the correction circuit produces the first symbol estimate and the second symbol estimate in response to the first symbol, the conjugate of the second symbol, the second symbol, the complement of the conjugate of the first symbol, the first estimate signal, and the second estimate signal.

48. (New)   The method of claim 44, further including receiving the first symbol and the conjugate of the second symbol over a common channel.

49. (New)   The method of claim 44, wherein the first symbol and the conjugate of the second symbol are received over a common frequency band.

50. (New)   The method of claim 44, wherein the plurality of symbol estimates corresponds to one of the first and second symbols.

51. (New)   The method of claim 44, wherein the steps of receiving a first symbol transmitted from a first antenna at a first time and a conjugate of a second symbol transmitted from a second antenna at the first time, and said producing a first symbol estimate in response to the first symbol and the conjugate of the second symbol, occur is a correction circuit.

TI-28441A   4

Application 10/601,866
Amendment dated September 29, 2003

52. (New)   The method of claim 44 [36], wherein the steps of receiving a plurality of symbol estimates including the first symbol estimate, the plurality of symbol estimates corresponding to a respective plurality of signal paths, and producing a first symbol signal in response to the plurality of symbol estimates, occur in a combining circuit.

53. (New)   The method of claim 52 [44], wherein the combining circuit is a rake combiner.

RECEIVED
CENTRAL FAX CENTER
SEP 3 0 2003

REMARKS/ARGUMENTS

Claims 23-33 added in the Preliminary Amendment of June 23, 2003 have been canceled. New Claims 34-53 have been added. New Claims 34-53 stand allowable over the cited art and the application is in allowable form. Applicants respectfully request allowance of the application as the earliest possible date.

Respectfully submitted,

Ronald O. Neerings
Reg. No. 34,227
Attorney for Applicants

TEXAS INSTRUMENTS INCORPORATED
P.O. BOX 655474, M/S 3999
Dallas, Texas 75265
Phone: 972/917-5299
Fax: 972/917-4417

OFFICIAL

TI-28441A   5